## Report: State should adopt low carbon standard for fuels

By Steve LeBlanc, Associated Press Writer | April 23, 2008

BOSTON --Massachusetts would become the second state in the country to adopt a so-called "low carbon fuel standard," setting limits on the amount of allowable greenhouse gas emissions under a plan unveiled by Beacon Hill leaders Wednesday.

The goal is to encourage alternatives to petroleum-based fuels for powering cars and heating homes and businesses -- creating a cleaner environment, slowing global warming and easing the state's dependence on foreign oil.

The recommendation was included in a report released by a special biofuels task force.

California is the only state to adopt a low carbon fuel standard and is in the process of developing regulations to put the standards into effect.

Gov. Deval Patrick said he hopes to encourage other Northeastern states to adopt similar rules. Massachusetts has already joined the Regional Greenhouse Gas Initiative, the first multistate program to curb carbon dioxide emissions from power plants by 10 percent by 2019.

"We get our fuels from a regional market, so the best way to encourage alternatives to petroleum is through a regional approach," Patrick said. "A region-wide low carbon fuel standard will have a profound impact on emissions."

The push for cleaner fuel could also help spark the state's economy by adding more so-called "green jobs."

The report estimated that an advanced biofuels industry could contribute \$280 million to \$1 billion per year to the Massachusetts economy by 2025, creating thousands of permanent and hundreds of temporary construction jobs.

While California's fuel standards apply to cars and other vehicles, the Massachusetts standard would also apply to home heating fuels -- a major source of emissions given the state's long, cold winters.

California Gov. Arnold Schwarzenegger said the two states are leading the country.

"Our low carbon fuel standards will reduce our dependence on oil, boost our clean technology industry nationwide and reduce greenhouse gas emissions," Schwarzenegger said in a statement.

Senate President Therese Murray, D-Plymouth, and House Speaker Salvatore DiMasi, D-Boston, also back the plan.

Sue Reid, a staff attorney for the Conservation Law Foundation, called the proposed standard an important step to address the fastest growing sector of greenhouse gas emissions.

But she said the average driver and homeowner shouldn't see much of a change at first.

"I don't think we will see any kind of net economic impact in the next few years, but ultimately it should have a beneficial impact given escalating fossil fuel prices," she said.

The most common form of biofuels in the United States is corn-based ethanol and soy-based biodiesel. Both have drawbacks, including cutting into the food supply.

The report said the state should focus instead on the development of advanced biofuels, typically derived from non-food-based feedstocks.

Researchers at Worcester Polytechnic Institute's Life Sciences and Bioengineering Center are investigating ways to develop biofuels based on cellulose, which makes up the heavy, woody fibers found in all plants.

Investigators are studying the stomachs of termites and other tiny organisms for hints on the best ways to turn fibers into fuel.

"The goal is to find a renewable source of liquid fuel that is better for the environment, that doesn't rely on crude oil, and that doesn't affect the price of food," said Alex Dilorio, assistant professor of biology and biotechnology. The research is sponsored by California-based biofuels startup EdenIQ.

The release of the report came the same day the National Oceanic and Atmospheric Administration announced greenhouse gases in the air are accumulating faster than in the past despite efforts to curtail their growth.

Carbon dioxide concentration in the air increased by 2.4 parts per million last year and methane concentrations also rose rapidly.